89088
Z/026/60/005/001/005/005
B112/B202

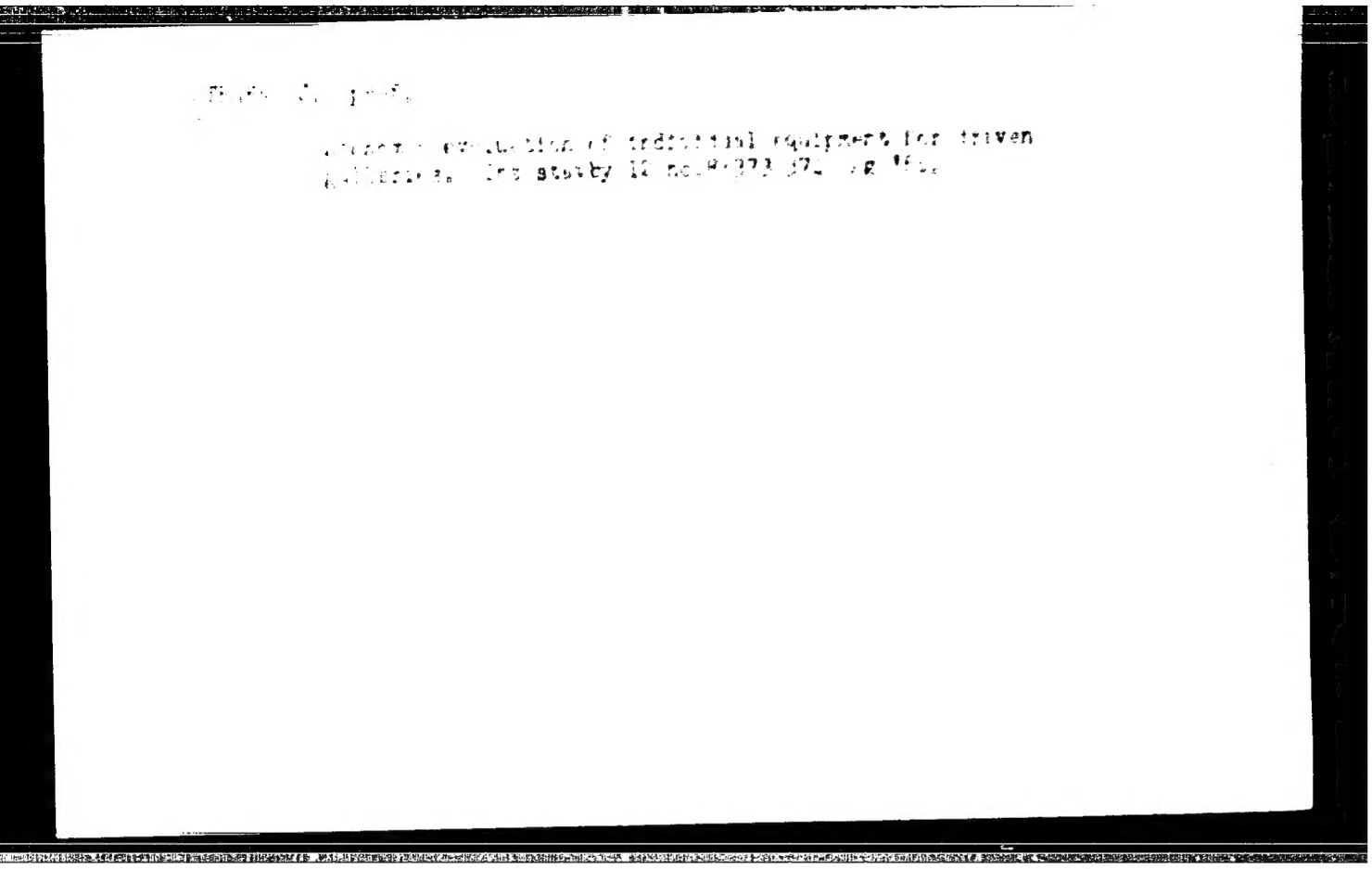
Contribution to the algebra...

Relation (1) corresponds to any spin value. The author discusses the problem in how far the relations (1) - (4) allow the representation of only such operators A_j and ω_j as correspond to the spin values 0, 1/2, 1. For this purpose, he studies the irreducible Hermitian matrix representations of the algebra with the fundamental relations (1) - (4) and he demonstrates that these representations can be divided into two classes one of which containing only representations with $\omega_j \neq 0$. This class actually corresponds to the spin values 0, 1/2, 1. The other class is of more trivial character: it contains the representations with $\omega_j = 0$ which identically fulfill the relations (2) - (4). Hence this class is exclusively determined by the relation (1) so that it corresponds to arbitrary spin values. There are 5 Soviet-bloc references.

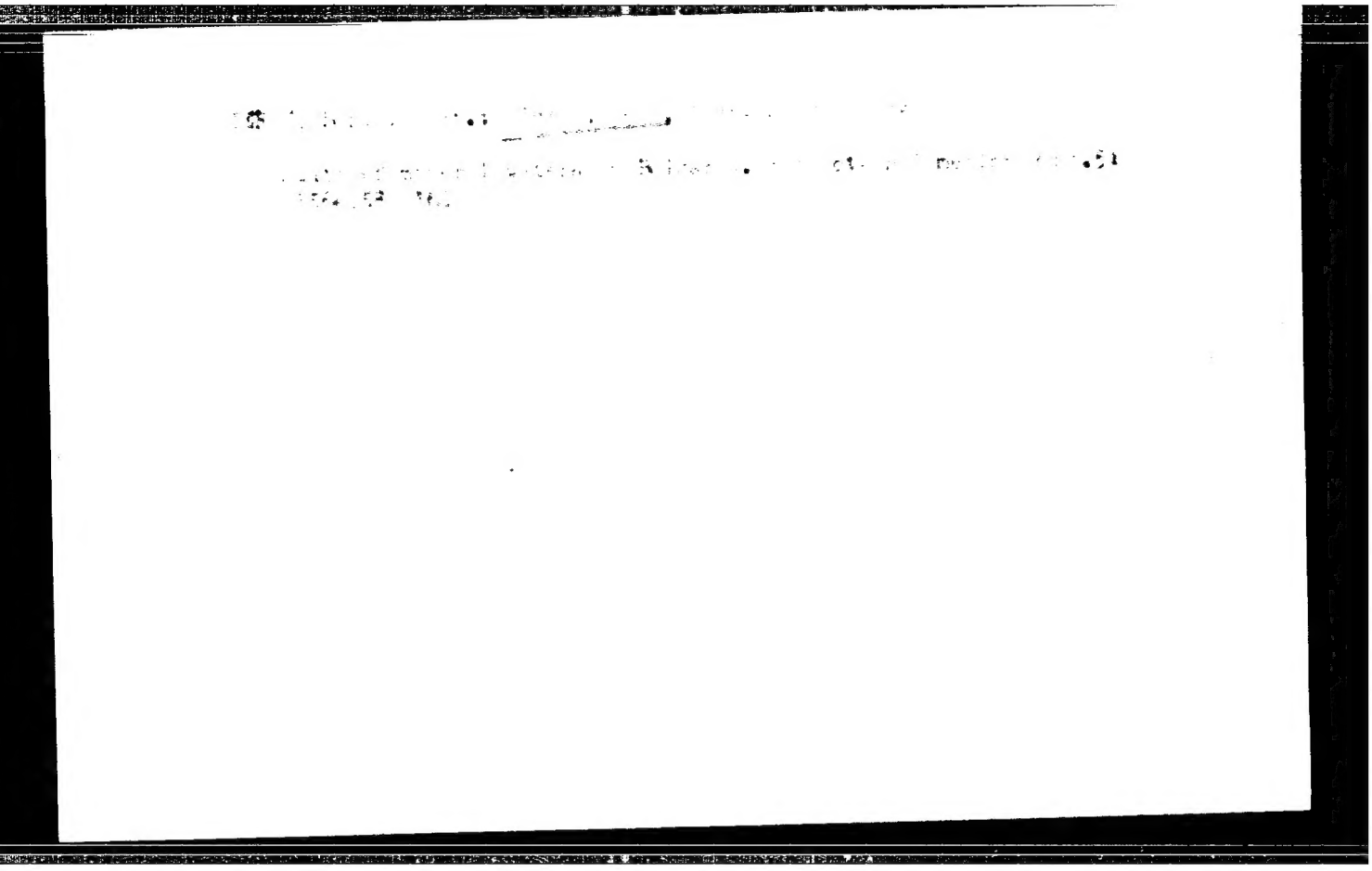
ASSOCIATION: CVUT, Praha (CVUT, Prague)

SUBMITTED: September 25, 1958

Card 2/2

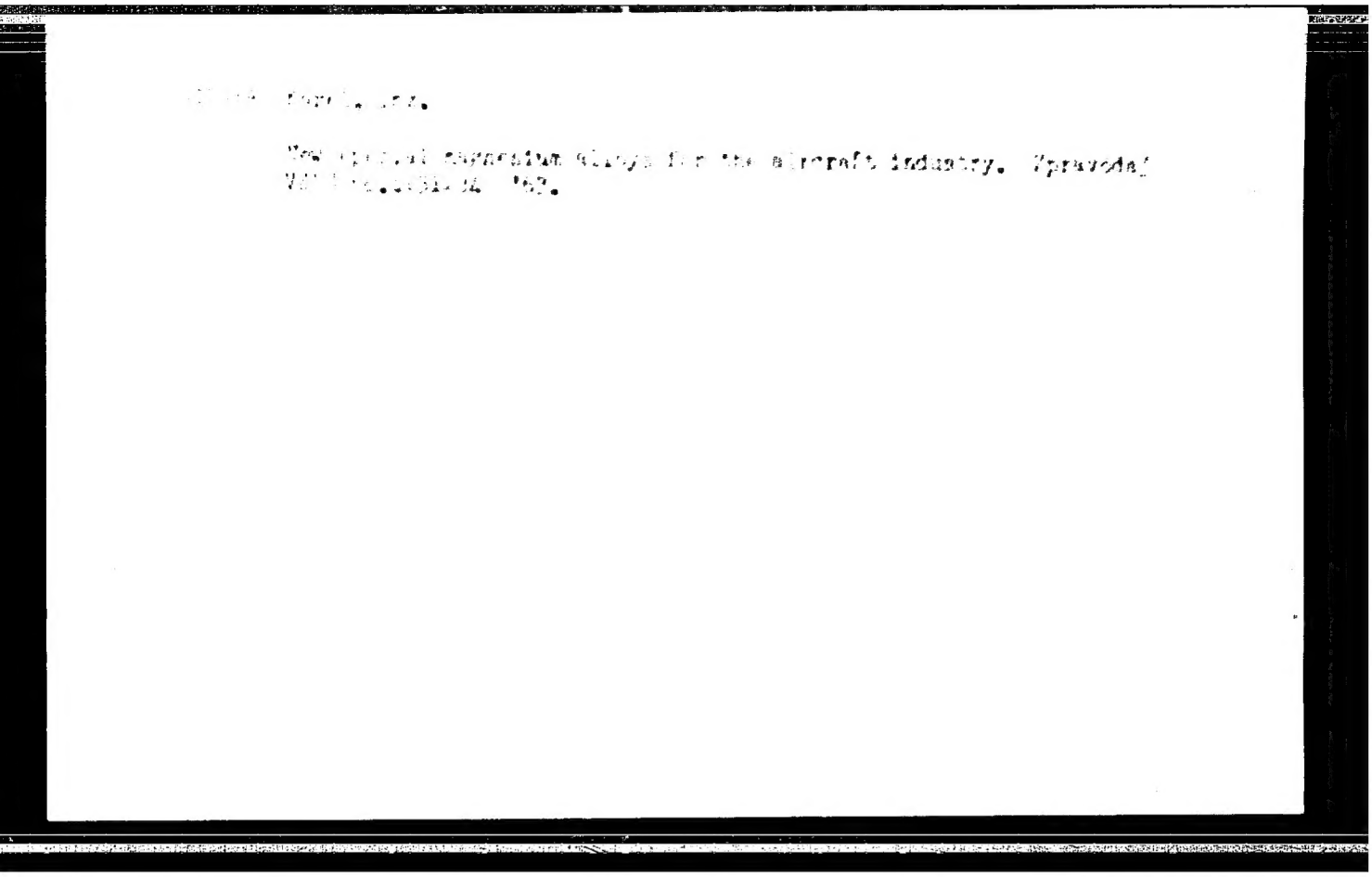


[redacted]



STRAKA, Karel, inz.

SAP - a new aircraft material on aluminum basis for higher operational temperature. Zpravodaj VZLU no.6:45-53 '61.



L 18542-65 EWT(m)/EWA(d)/EWP(t)/EWP(b) IJP(c) JD/JG/JXT(CZ)
ACCESSION NR: AP4043940 Z/0059/63/000/004/0031/0054

AUTHOR: Straka, Karel (Engineer)

TITLE: Special new manganese* alloys for the aircraft industry

SOURCE: Letnany. Vyzkumny a zkusebni letecky ustav. Zpravodaj vzlu, no. 4(40), 1963, 31-54

TOPIC TAGS: manganese* alloy, addition element, strength, creep strength, oxidation resistance, aircraft industry, casting, forging

ABSTRACT: The article discusses the uses of special manganese* alloys in the western world, trends in the development of these alloys in Czechoslovakia and abroad, the effect of impurities, the classification of special manganese* alloys and their properties, the mechanical properties of these alloys at high and low temperatures, the technological properties of special manganese* alloys, in particular casting alloys, advanced technological methods for working and machining special manganese* alloys, the development of special manganese* alloys abroad and in Czechoslovakia, and the development of new special manganese* casting alloys in Czechoslovakia. In addition to the increasing general demand for strong light-

Card 1/4 * Mostly magnesium [illegible] not manganese alloys.

weight alloys, in the aircraft rocketry, and other branches of industry, the need for the accelerated development of manganese alloys has been accentuated in Czechoslovakia because of the insufficiency of the domestic aluminum supply. The new special alloys are classed according to their specific properties, and a survey is made of these alloys used in the USSR, USA, West Germany, and Britain, covering their composition and typical physical, technological, and mechanical properties. The alloys discussed were selected on the basis of their economic importance and the availability in Czechoslovakia of the raw materials to make them, and they are compared with conventional alloy types. It is pointed out that recently developed Czech manganese* alloys are comparable in quality and properties to alloys produced abroad. This is particularly true of the Mg2Zn3VZr, and possibly of the Mg3VZr, new alloy types for high-temperature operation up to 250°C, and for the Mg5ZnZr, and possibly for the Mg4ZnZr high-strength alloys. According to their specific properties and advantages in operation, the special manganese * alloys currently produced in Czechoslovakia and abroad may be classified as follows: 1) alloys suitable, as the classical manganese* alloys, for operation at normal temperatures, but which are of relatively greater strength and uniformity of properties; 2) alloys of relatively low strength at normal temperatures, but which are suitable for operation at higher temperatures and have greater creep

L 14542-65
ACCESSION NR: AP4043940

strength up to 250-350°C; 3) alloys with relatively low strength and uniformity of properties at normal temperatures, but which are at the same time suitable for operation at higher temperatures and have higher creep strength up to 250-350°C. Up to the present time in Czechoslovakia manganese alloys have not been used on a large scale in comparison with other industrially developed countries, not because the necessary, basic raw materials are not available there, but because certain special addition elements required for certain alloys, in particular alloys for operation at high temperature, have had to be imported. Their production in the required form, however, is shortly to be achieved in Czechoslovakia. Of the special types of manganese alloys for forming, Czechoslovakia produces MgAlBe, intended principally to meet the requirements of nuclear engineering (e.g., for fuel-element housings), for greater oxidation resistance of surfaces exposed to gaseous coolants (CO_2). This is the so-called "Magnox" alloy containing 0.7 - 1% Al, and 0.02 - 0.05% beryllium. It was discovered that the beryllium addition element has a basically favorable effect imparting increased long-term and short-term strength, increased creep strength (up to 1,000 hrs) at higher temperatures (investigated to 500°C), increased structural stability and mechanical properties and resistance to thermal shock, greater resistance to oxidation in air compared to the classical manganese alloys. The raw materials for alloying with zirconium

Card 3/4

are at present also imported. However, a pilot plant for producing metallic zirconium from zirconium tetrachloride has been put into operation, and it is hoped that in the future certain zirconium salts will be produced in Czechoslovakia. There is reason to believe that the raw materials for the basic addition elements for the production of the new types of manganese casting alloys, which at present are relatively easy to obtain from the Soviet-bloc countries, will eventually be available from domestic sources. The limited application of low-temperature alloys is a problem in Czechoslovakia which has been met by using various addition elements, permitting the use of manganese alloys at operating temperatures up to 350°C, and for short periods, even up to 350°C. Orig. art. has: 23 diagrams and 24 tables.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MM

NO REF SOV: 005 OTHER: 013

ACCESSION NR: AP4015894 Z/0040/64/000/001/0024/0024

AUTHOR: Straka, Karel (Engineer)

TITLE: From the conference dealing with gas turbines

SOURCE: Letecky obzor, no. 1, 1964, 24

TOPIC TAGS: gas turbine, jet engine, construction materials, aerodynamics, blower, compressor, economic planning

ABSTRACT: Report describing a conference on gas turbines held on 4-6 Nov 63 in Prague is given; 283 Czech and 9 East German engineers attended. Main topics were turbines produced in East Germany and the Czech jet engine M-701. 21 lectures dealt with construction materials and their technology; 19 with strength of materials and dynamics; 26 with turbine- and jet-engine thermodynamics. Unsatisfactory development of jet engines in Czechoslovakia is reported as not due to technical difficulties but to bad organization and incompentent economic evaluation of the problem. Engine M-701 was developed for training jet aircraft L-29 designed by VZLU at Lentnary. Its thrust has been increased from the orginal 830-850 to 900 kgs. Improvements in axial blowers and compressors

Card 1/2

ACCESSION NR: AP4015894

were also discussed. Expanders for chemical and metallurgical industry were reviewed. Future application of jet engines in aviation and power stations was evaluated. A resolution was accepted stressing completion of aircraft-engine- and construction-materials study, investigation of internal aerodynamics, fatigue, and stresses in the combustion parts of combustion turbines. Greater availability of computers is needed to achieve the objects of planned development. Orig. art. has no graphics.

ASSOCIATION: none

SUBMITTED: 00	DATE ACQ: 03Feb64	ENCL: 00
SUB CODE: PR AC	NO REF SOV: 000	OTHER: 000

Card 2/2

STRAKA, L.

STRAKA, L. Report on the activities of the Fruit Research Institute. p. 665, Vol. 3, No. 12, 1956, VESTNIK Praha, CZECHOSLOVAKIA

S/O: East European Accessions List (EEAL) Vol. 6, No. 4—April

Excerpta Medica Sec 16 Cancer Vol. 2/4 April 54

1529. STRAKA L. Rakovinový vek a depistáz rakoviny (Máj 1952) *The cancer age and the detection of cancer* Bratislavské lekárs. list. 1953, 33/4 (261–279) Graphs 6 Tables 13

A statistical elaboration of 3,735 cases is facultatively reported from 1947 to 1951 in Bratislava. The international classification system of causes of death from 1948 has been used. The results are in sequence of frequency of the cancer. The ages in which peaks of frequency occur, are added in each group between brackets. Carcinoma of the breast and the urogenital system makes up 41.34% of all reported cases. In this group men form 9.91% (age tops from 59 to 65), and women 90.09% (age tops from 51 to 53). The percentage with regard to women (90.09%) can be further analysed: carcinoma cervicis uteri, 36.8%; carcinoma mammae, 29.2%; carcinoma corporis uteri, 18.5%; carcinoma ovarii, 8.6%. Carcinoma of the digestive tract and peritoneum compose 29.88% of all reported cases. Herein, men form 53.5% (56.5 to 59 yr.), and women 46.5% (55.5 to 58.5 yr.). Most are gastric carcinoma. In men the percentage is 63.0%, and in women 52.8% (of the latter percentages). Carcinoma of the skin and miscellaneous areas exist in 12.88% of all reported cases. In this group men form 50.1% (61 to 65 yr.) and women 49.9% (58.5 to 63.5 yr.). The majority display carcinoma dermatis: in men 73.4% and in women 74.2% of the latter percentages. Carcinoma of the oral cavity and oesophagus: this group composes 8.54% of all reported cases. Herein, men form 82.45% (58.5 to 63 yr.), and women 17.55% (56 to 67.5 yr.). Carcinoma of the respiratory tract: 7.36% of all reported cases. Men form 55.27% (58 to 64 yr.), and women 44.73% (59 to 65.5 yr.). Most reported are carcinoma nasi: in men 42.8% and in women 87.0% of the latter percentages. As to the ages: carcinoma mammae and gynaecologic cancer begin at about 27 yr. of age; all other cancers both in men and women must be looked for from about 35 yr. of life.

Bloch – Amsterdam

SITAJ, S.; STRAKA, L.; HIEPEL, G.

Research on the occurence of rheumatic diseases in the population as a whole. Bratisl. lek. listy 34 no.6:612-639 June 54.

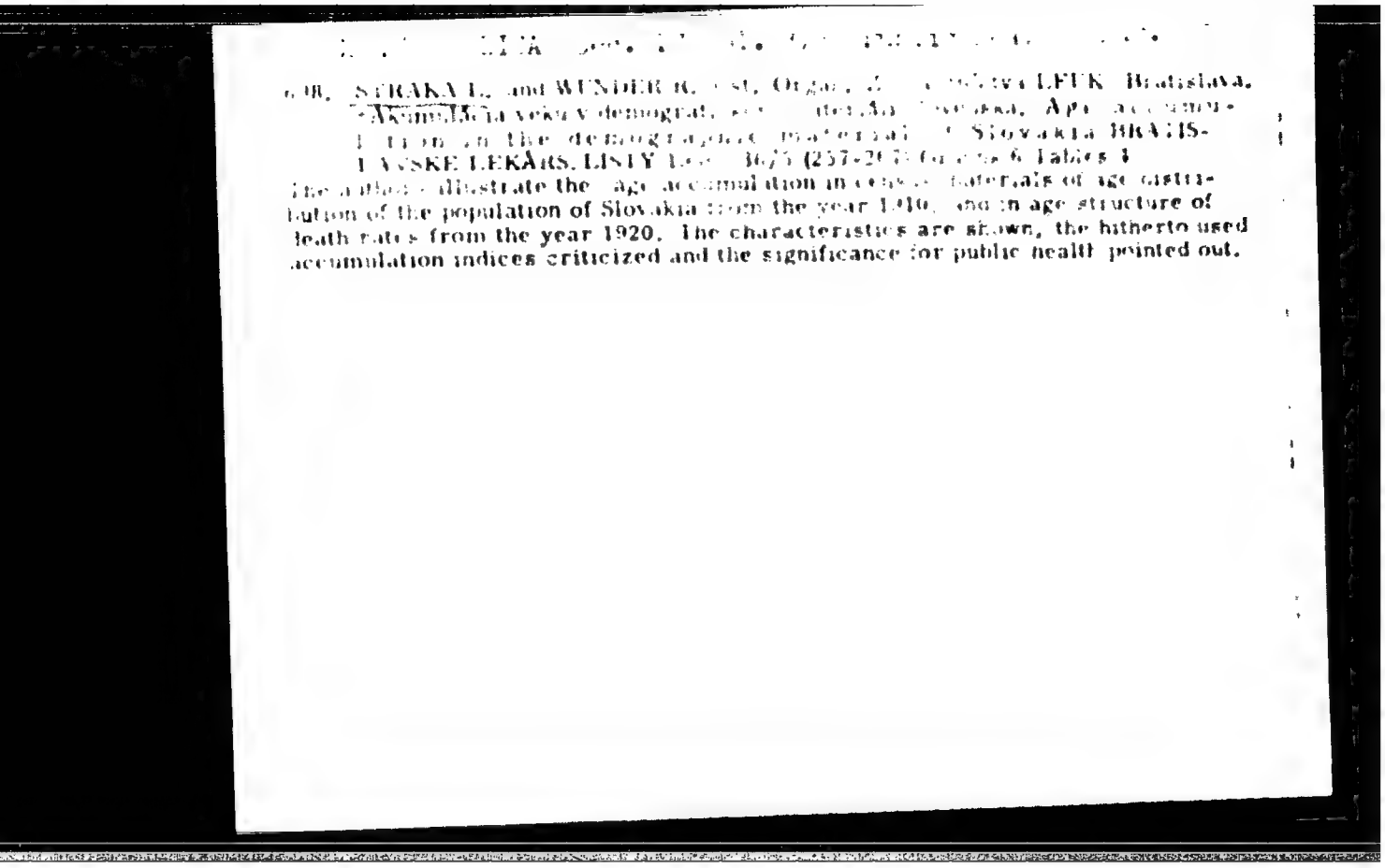
1. Z Vyskumneho ustavu reumatickych chorob v Piestanoch, prednosta doc. S. Sitaj, a zo Strediska pre zdrav. statistiku v Bratislave, prednosta dr. L. Straka.
(RHEUMATISM, epidemiology
statist. survey)

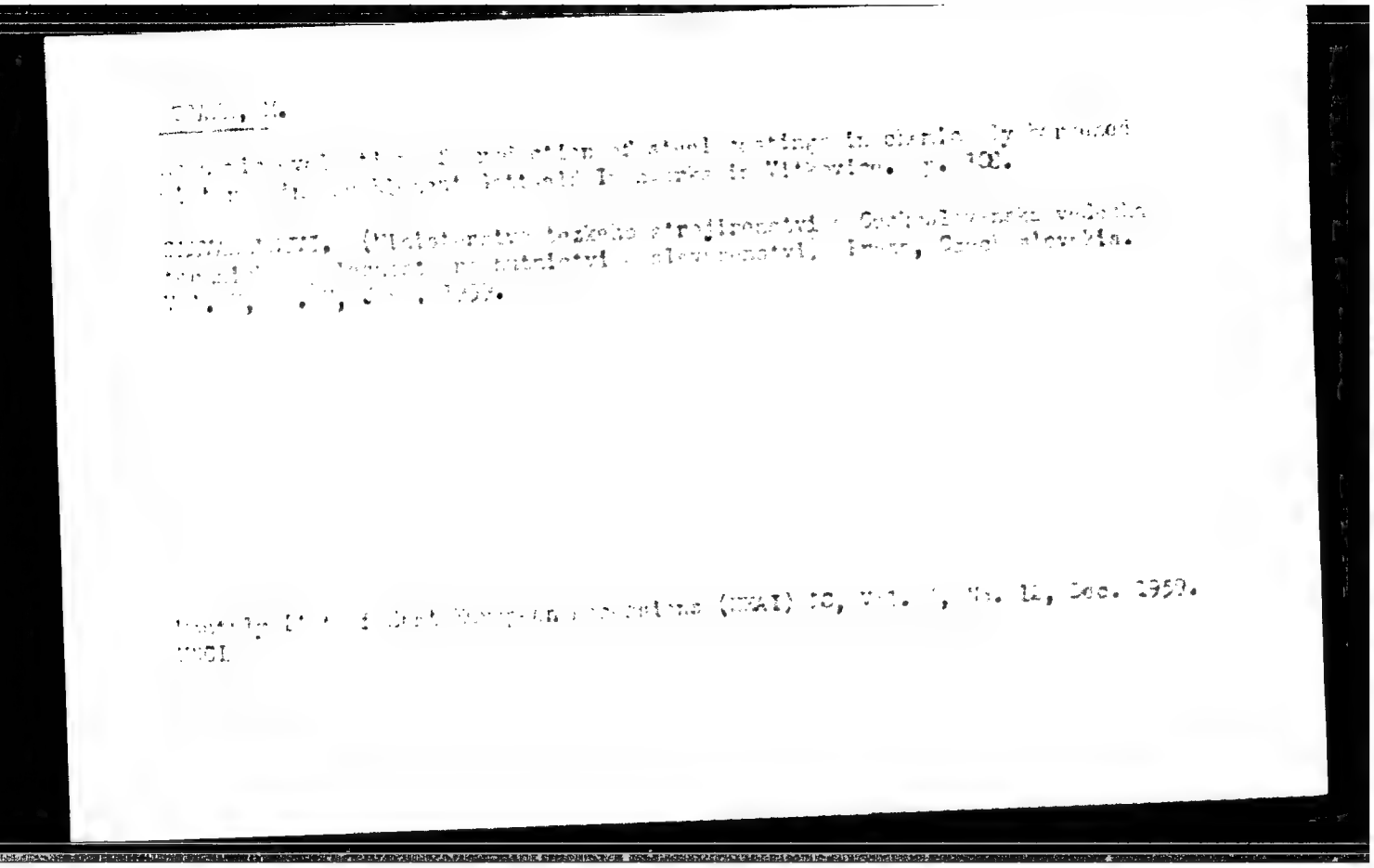
STRAKA, L.

Prolongation of life in Slovakia during the past 30 years. Bratisl. lek. listy 35 no.4:193-222 15 Feb 55.

1. Z Ustavu organizace zdravotnictva LFUK v Bratislave, predn. doc. MUDr P.Macuch.

(LIFE EXPECTANCY
in Slovakia, increase)
(VITAL STATISTICS
in Slovakia, increase of life expectancy)





NAVARCIK, Miroslav; STRAKA, Martin

Automation of welding of seats in making fittings. Stroj vyr 10 no.10:507,512 O '62.

1. Jihomoravska armaturka, n.p., Hodonin.

STRAKY, N.

Our thanks to the Party and government for reduction of prices will be expressed through good work in all enterprises of light industry, p. 113, SKLAR A KERAMIK (Ministerstvo lehkeho prumyslu) Praha, Vol. 4, No. 5, May 1954

SOURCE: East European Accessions List (EEAL) Library of Congress, Vol. 4, No. 12, December 1955

STRA, H.

Our thanks to the Party and to the government for the reduction of prices are expressed through active work in all enterprises of light industry. p.129. Working people will gain a victory! p.130. (Textil, Praha, Vol. 9, no. 5, May, 1954)

SO: Monthly list of East European Accessions (EEAL), LC Vol 4, No. 6, June 1955, Uncl

S/271/63/000/002/016/030
A060/A126

AUTHORS: Dubský, Bořivoj, Straka, Oldřich, Rajhel, František, Trakal, Vladimír

TITLE: Position servomechanism with magnetostrictive sensor

PERIODICAL: Referativnyy zhurnal, Avtomatika, Telemekhanika i Vychislitel'naya Tekhnika, no. 2, 1963, 77, abstract 2A473 P (Czech. pat. cl. 21 c, 46/50; 21c, 57/50, no. 96935, October 15, 1960)

TEXT: Patented is a servomechanism with a magnetostrictive pickup which may be used in the construction of high-speed counters, digital instruments and other automatic devices. Rigidly fixed to the frame of the mechanism is an immovable guide-rail, along which the fixed part of the carriage with the indicator moves on wheels. The carriage is connected to the movable part by a spiral spring; the wheel of the latter is attached at the bottom to the movable slide of the (measuring) instrument. The latter is fixed at one end to the free end of a magnetostrictive torsion pickup located on the frame of the mechanism. The device operates in such a way that the action of the force being measured (which

Card 1/2

Position servomechanism with magnetostrictive sensor

causes a torque on the axis of the pickup equal to the product of that force and the length of the movable slide) is automatically balanced by the torque. The latter is equal to the product of the force of the fastening of the movable part of the carriage to the movable slide and its distance from the pickup axis. The movable slide may have a shape appropriate to the curve of the process being regulated.

B. Kh.

[Abstracter's note: Complete translation]

Card 2/2

STRAKA, F.

"Vacuum filter for purifying waste waters in wood-pulp and paper factories." p. 229. (Papir A Celulosa. Vol. 8, no. 12, Dec. 1953. Praha.)

SO: Monthly List of East European Accessions, Vol. 3, no. 6, Library of Congress, June 1954. Uncl.

[illegible], I.

[illegible], I. Fuller of sulfite liquor. p. 324.

Vol. [illegible], No. [illegible], Sept. 195[illegible]
[illegible]
[illegible]
Praha, Czechoslovakia

See: East European Accessions, Vol. , No. 5, May 1956

STRAKA, P.

CZECHOSLOVAKIA/Chemical Technology - Chemical Products and Their Application. Water treatment. Sewage water. I-11

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 12791

Author : Straka P.
Title : Purification of Sewage Water of Paper and Sulfite Cellulose Industry

Orig Pub : Cisteni odpadnich vod papirenskych a sulfitovych. Vodni hospodarstvi, 1955, 5, No 12, 426-428 (Czech)

Abstract : A comparison is made of the results of purification of sewage water (SW) of paper and cellulose industry by precipitation, flotation and filtration methods. The first two methods permit to decrease the concentration of coarsely dispersed admixtures by 98-99%, while filtration decreases it by 60-85%. Good results are obtained on using as the filtering medium the very substances that are being removed by filtration. Filtration must be conducted at pH 4.6-8.0. Precipitation can be accelerated by 10-12

Card 1/2

CZECHOSLOVAKIA/Chemical Technology - Chemical Products and Their Application. Water treatment. Sewage water. I-11

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 12791

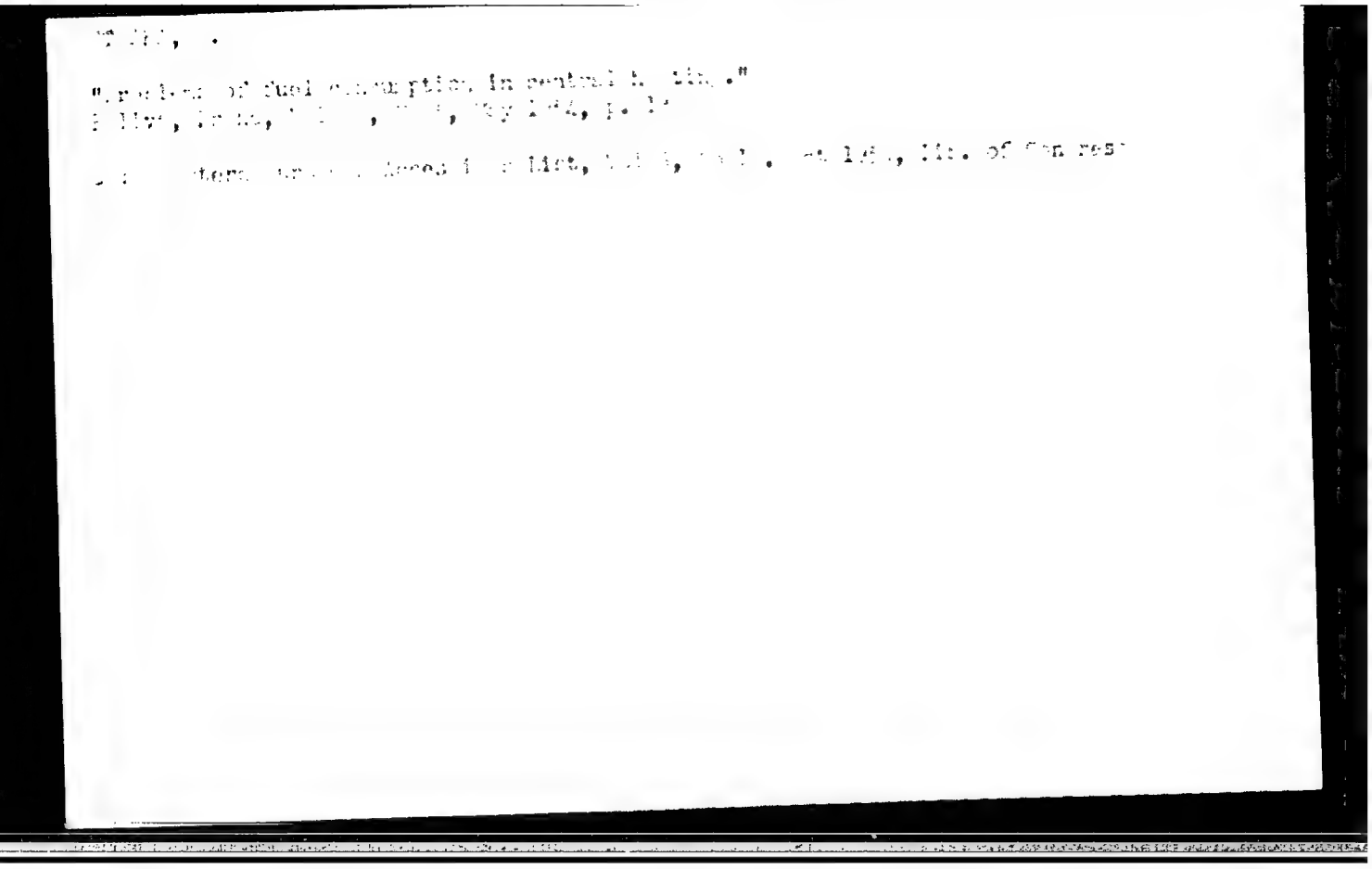
times on using as coagulants the humic substances derived from brown coal. This also lowers appreciably the oxidability of SW.

Card 2/2 - 191 -

STRAKA, R.

"Courses of Instruction on New Methods of Combustion of Substitute Fuels in Boilers for Central Heating." p. 42, Praha, Vol. 4, no. 1, Jan. 1954.

SO: East European Accessions List, Vol. 3, No. 9, September 1954, Lib. of Congress



STRAKA, R.

Economical method for heating with coal in coke boilers of central heating systems. (Supplement) p. 1. PALIVA. (Ministerstvo paliv a energetiky) Praha. Vol. 35, no. 6, June 1955.

SOURCE: East European Accessions List (EEAL), Library of Congress, Vol. 4, No. 12, December 1955.

[illegible], J., [illegible], B.

Research Institute of Epidemiology and Microbiology (Vyskumne Ustav Epidemiologie a Mikrobiologie), Bratislava - (for both).

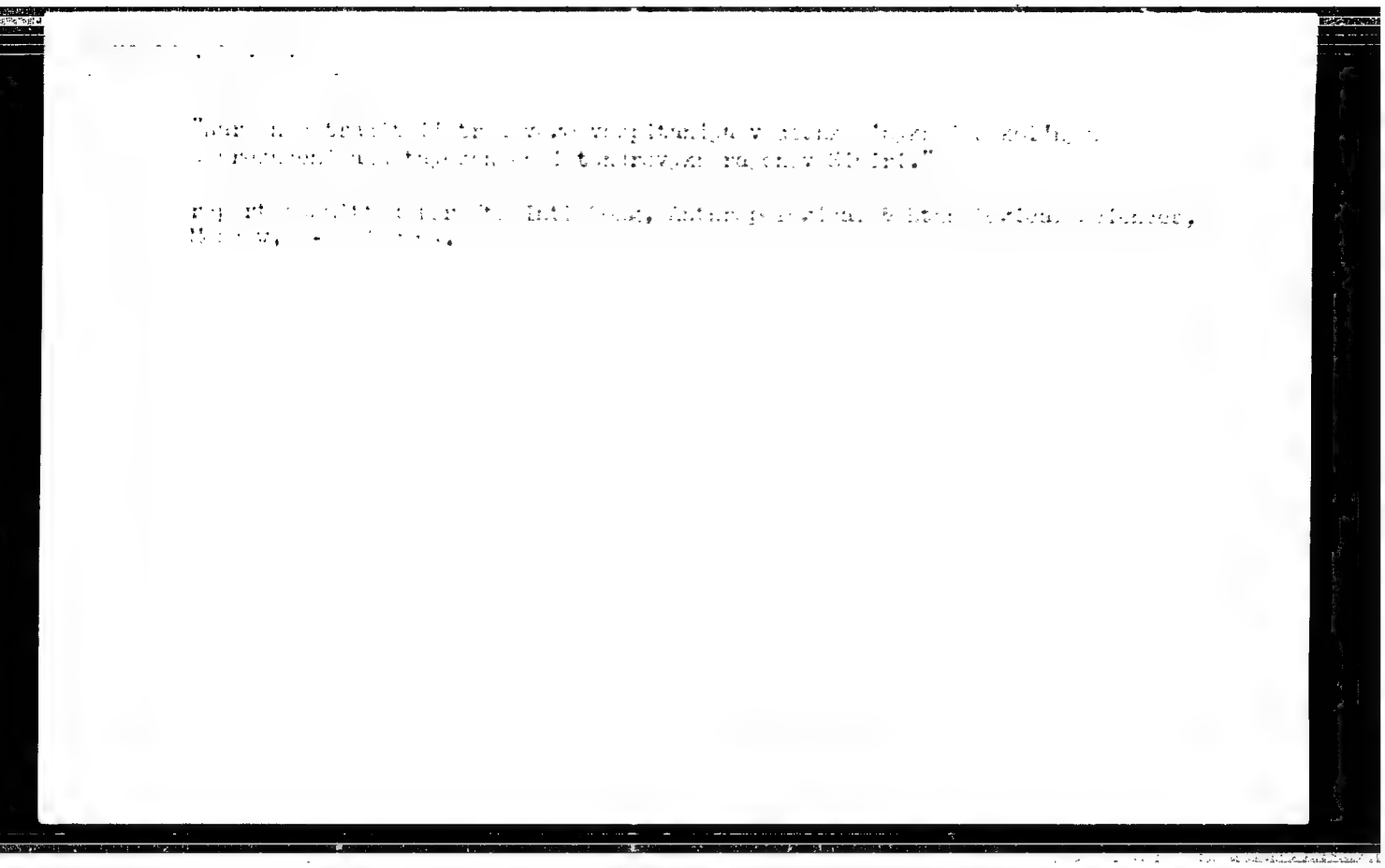
Bratislava, Lekarsky obzor, No 8, August 1965, pp 477-489.

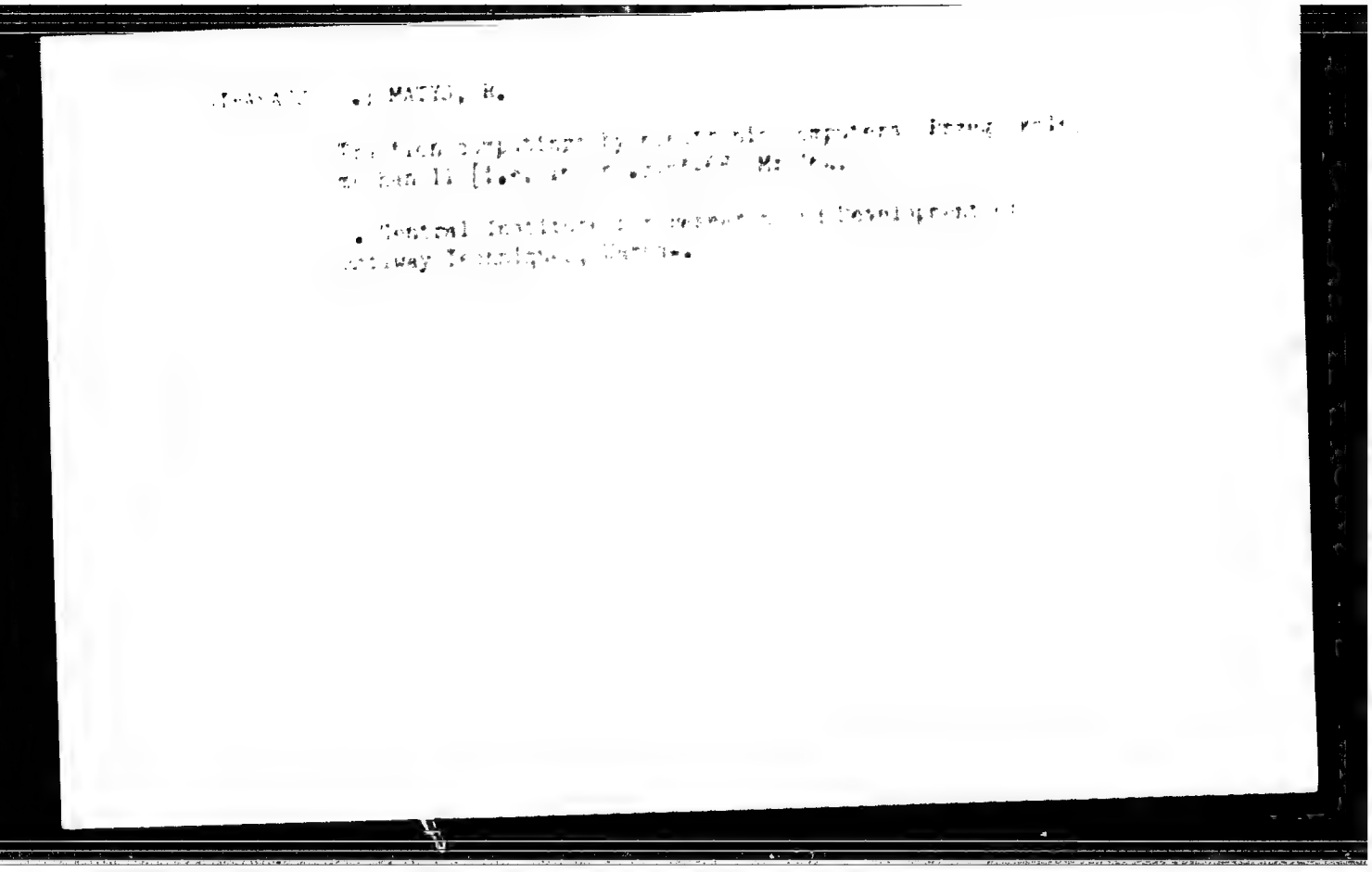
"Epidemiological problems of poliomyelitis and polio-like diseases since the beginning of the mass active immunization."

SVACHA, Miroslav; STRAKA, Zdenek

Design of turnover and release molding machines. Slevarenstvi 11 no.5:184-189 My '63.

1. Zavody V.I. Lenina Plzen, zavod Ostrov, vyvoj slevarenskeho zarizeni.





L 40763-65 EWT(d)/EWA(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l) Pf-4
ACCESSION NR: AP5012323 UR/0286/64/000/022/0008/0008

20
19
B

AUTHOR: Simonov, N. S.; Strakhal', V. A.; Rebrik, B. M.; Ostrovskiy, V. I.; Fomin, A. G.

TITLE: Self-propelled unit for vibration drilling. Class 5, No. 166287

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 22, 1964, 8

TOPIC TAGS: mining machinery

Translation: This inventor's certificate introduces a self-propelled vibration drilling assembly mounted on a motor vehicle. The device includes a hoisting tower, winch, generator and vibrator. In order to cut down on the number of additional operations and to speed them up, the tower is of the open type, П -shaped and equipped with a transverse support brace. It also has a flexible element of constant length for suspending the vibrator during folding and raising the tower. 2. A unit of this description equipped with a carriage which is a connecting element between the penetration equipment and the guides of the tower so that the device may be used for impact sounding. 3. A unit of this

Card 1/2

L 40763-65
ACCESSION NR: AP5012323

description in which the winch is equipped with a normally open brake which has a spring contactor so that the unit may be used for cable percussion drilling.

ASSOCIATION: Vsesoyuznyy proyektno-izyskatel'skiy i nauchno-issledovatel'skiy institut "GIDROPROYeKT"im. S. Ya. Zhuka (All-Union Institute of Preliminary Study and Design and of Scientific Research "GIDROPROYeKT")

SUBMITTED: 00	ENCL: 00	SUB CODE: IE
NO REF SOV: 000	OTHER: 000	JPRS

Card 2/2

[illegible], L. V., [illegible], K. N., [illegible], L. G. and SINOPEL'NIKOV, N. A.

"Ixodid Ticks are Carriers and Vectors of Tularemia in Krasnodar Kray."

Tenth Conference on Parasitological Problems and Diseases with Natural Reservoirs, 27-29 October 1959, Vol. II, Publishing House of Academy of Sciences, USSR, Moscow-Leningrad, 1959.

Krasnodar Kray Sanitation and Epidemiology Station and the Rostov-on-Don Antiplague Institute

STOYANOV, Ye.M.; STRAKHILOV, D.

Influence of chlorpromazine on the course of staphylococcal infection. Khirurgiia no.12:97-101 '61. (MIRA 15:11)

1. Iz kafedry khirurgii i urologii (zav. - prof. G. Popov) Vysshego meditsinskogo instituta v Sofii i laboratorii po gigiyene pri meditsinskom otdele Ministerstva vnutrennikh del (nach. - d-r D. Todorov).
(CHLORPROMAZINE) (STAPHYLOCOCCAL DISEASE)

B[illegible]LGARIA

As. TOMOV, [illegible] SH[illegible]KOVA and D. [illegible]MIHILOV, [illegible] Nauchen [illegible] po epidemiologiya i mikrobiologiya, Scientific Institute for Epidemiology and Microbiology, and [illegible] (Generalized Military Hospital (V[illegible]nna [illegible] [illegible]. Director (Direktor) of [illegible] Vl. KALA[illegible] Head (Nachalnik) of Military Hospital T. IVANOV.

"[illegible] enicillin-[illegible] of Staphylococci."

Sofia, [illegible] Voenna Meditsina i Morfologiya, Vol 1, No [illegible], 1[illegible]52; pp 27-3[illegible].

Abstract [illegible] summary modified]: Study of 53 penicillin-resistant and 2[illegible] [illegible]tive Staph. aureus strains, all clinical coagulase-positive isolates [illegible] of hemolysis, [illegible] lysis, phosphatase, [illegible], mannite, gelatine, egg yolk, pigment formation, dehydrogenase, necrotizing [illegible]. Results lead to conclusion that penicillin resistance [illegible] to correlate with complex changes of the enzymatic activity as well as [illegible] regardless of [illegible] presence of the antibio[illegible]. Three tables; 2 Bulgarian and 3 Western ref's.

1/1

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653420011-8"

[illegible]

[illegible]

Periodical: [illegible] No. 3/6, 1958.

[illegible], S. The theory of free flow of water under a sluice gate. p. 223.

Monthly List of East European Accession (EEAI), LC., Vol. 8, No. 2,
February 1959, Unclass.

STRAKHILOV, E.I., [illegible], inzh.

Outflow under concave segment gate. Khidrotekh i melior [illegible] no.6:183-186 '63.

[illegible]

Automatic regulators in hydraulic engineering. Hidrotech i melior 8 no.9:275-278 '63.

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653420011-8"

492 THE ROLE OF THE SYMPATHETIC NERVOUS SYSTEM IN THE CENTRAL INHIBITION OF CARDIAC ACTIVITIES (Original text in Russian). A. B. [illegible] and M. A. [illegible]: PHYSIOLOGICAL JOURNAL (Russian) Mar-Apr '50 (36-2 Bi-Monthly): pp 140-146

Experiments conducted by various scientists have led to the conclusion that the centers of circulating nerves are under constant regulating (adaptation trophical) effect of the sympathetic nervous system. The exclusion of the latter effect by separating all connecting dendrites [illegible] leads to an increased tonicity of the circulating nerve centers and consequently to a sharp change in the rhythm of the cardiac activity with a tendency to slow down. Injection of sodium chloride crystals into the thalamus region will in a majority of cases show certain direct depressing effects on the tonicity of the vagus centers and will bring a slightly increased frequency of the heart rhythm. The effect of the sympathetic nerve regulating the functional characteristics of the bulbous section of the brain is explained by the fact that the sympathetic nerve produces a sharply increasing excitability in the action of a part of the central nervous system. A thermal, electrical, or chemical irritation of the bulbous centers produces a standstill of the heart of the [illegible] [illegible] or in other words a sharp retardation of heart rhythm.

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653420011-8"

S/219/62/054/007/001/001
1015/1215

272700

AUTHOR Strakhov, A. B.

TITLE EEG changes as a result of prolonged noise

PERIODICAL Byulleten' eksperimental'noy biologii i meditsiny, v. 54, no. 7, 1962, 11-13

TEXT Only a small number of studies report the effect of noise on the various organs and systems. As far as the origin and the mechanism of the disorders caused by noise is concerned, there are almost no data at all in the literature. The experiments were carried out on rabbits and dogs, which were subjected to intense noise for several weeks, and on men, who were subjected to noise for a shorter period of time. The noise produced by a rotating metal drum containing small pieces of metal was of intensity 90-100 db and the frequency reached a maximum of 2000-3000 cycles/sec. The effect on the CNS was recorded by EEG, using G T Sakhiulina's method for the animals. The noise produced an increased frequency of oscillations (60-75 cycles/sec in rabbits and 75-80 cycles/sec in dogs). In men, using a routine method, a depression of the alphar-hythm, the appearance of beta-rythm, and the presence of spike-potentials over various parts of the cortex, were observed. These potentials lasted for 5-8 min after the interruption of the noise. The author discusses the role of the reticular formation in the reaction of CNS to noise. There are 2 figures.

Card 1/2

ACCESSION NR: AP4031814 S/0240/64/000/004/0029/0037

AUTHOR: Strakhov, A. B. (Candidate of medical sciences)

TITLE: Effect of intensive noise on certain body functions

SOURCE: Gigiyena i sanitariya, no. 4, 1964, 29-37

TOPIC TAGS: noise effect, high frequency sound, prolonged intensive noise, central nervous system, cardiovascular system, EEG, EKG, conditioned reflex activity change, arterial blood pressure change, large hemisphere, brain stem, reticular formation

ABSTRACT: The present study, based on experiments and the literature, investigates the effects of intensive noise on the central nervous system and the cardiovascular system. EEG, EKG, conditioned reflexes, and arterial blood pressure were used as indices in determining the effects of intensive high frequency noise in the investigations which were of rabbits, dogs, and humans. Experimental findings show that intensive high frequency noise produces numerous shifts in the central nervous and cardiovascular systems: conditioned reflex activity changes, brain electrical activity changes, significant fluctuations

Card 1/2

ACCESSION NR: AP4031814

of arterial blood pressure, and functional weakening of cardiac muscular contractions. All of these shifts generally appear only as a phase which may account for the various discrepancies in them as described by other experimenters. Prolonged intensive noise leads to simultaneous changes in brain electrical activity not only in the specific aural areas but in other sections of the large hemisphere cortex and subcortex, and this suggests that the changes are produced by a common source - the reticular formation of the brain stem. Activation of reticular formation by sound has been found in several literature studies. Orig. art. has: 5 figures.

ASSOCIATION: Kafedra normal'noy fiziologii Gor'kovskogo meditsinskogo instituta (Normal Physiology Department of Gor'kov Medical Institute)

SUBMITTED: 12Feb63 ENCL: 00 SUB CODE: LS

NR REF SOV: 015 OTHER: 008

Card 2/2

SOURCE CODE: UR/0000/66/000/000/0353/0355

AUTHOR: Strakhov, A. B. 21

ORG: none

TITLE: Some problems of the mechanism of action of noise on the organism [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24-27 May 1965]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 353-355

TOPIC TAGS: acoustic biologic effect, central nervous system, electroencephalography, biologic respiration

ABSTRACT:

Intense noise is known to affect central nervous system and cardiovascular system function in man and animals; however, the mechanism of these changes is still imperfectly understood. Several years of research by the authors on the effect of intense, high-frequency noise (95--100 db, 1500-3000 cps) on the organism revealed generalized changes in the background rhythm of EEG's. A gradually increasing desynchronization of cortical rhythms was noted in human subjects, together with the appearance

Card 1/3

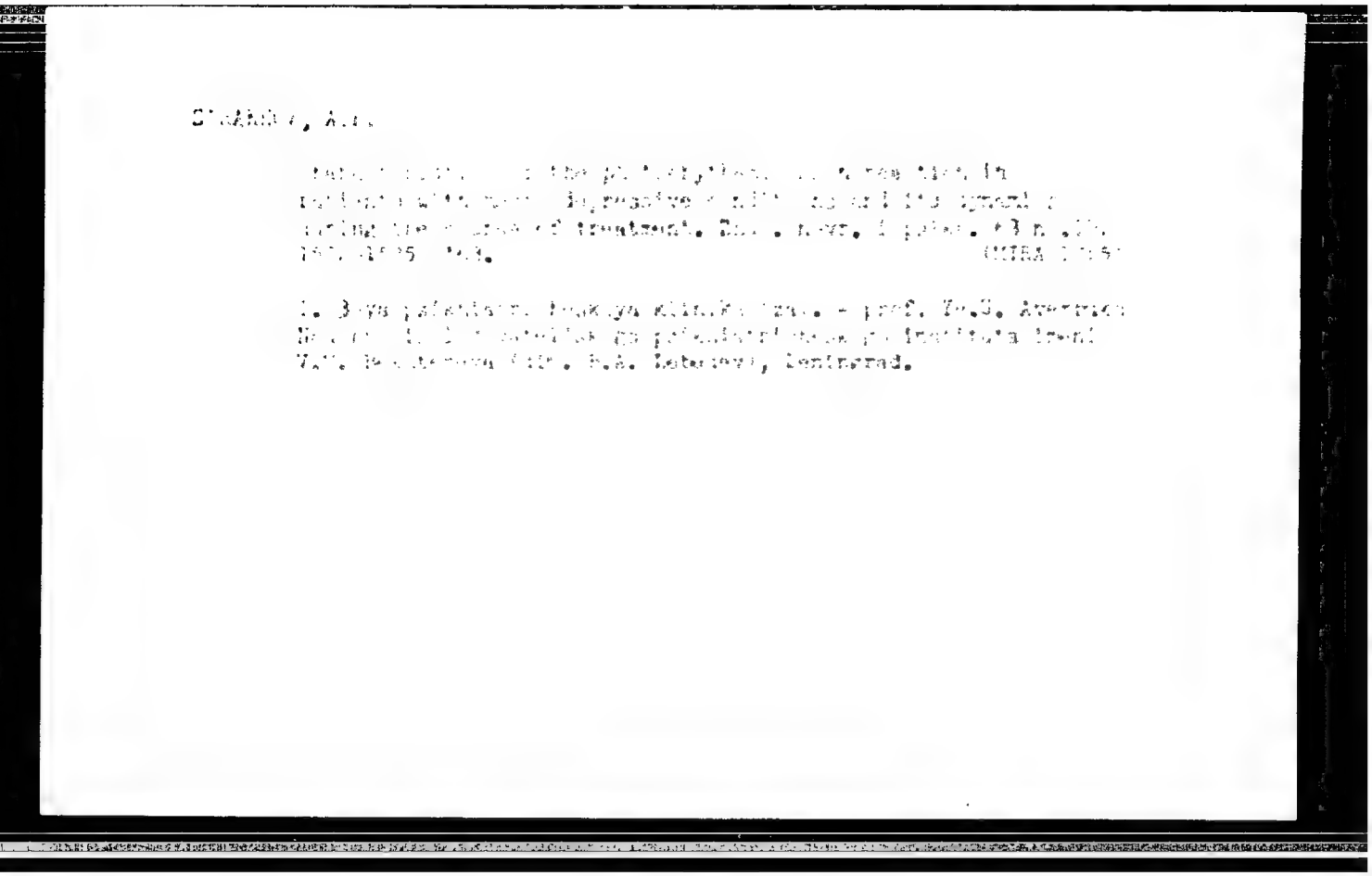
of slow waves, whereas in animals (rabbits, cats) both desynchronization and synchronized rhythms occurred. The general character of noise-induced changes, the considerable aftereffect of noise, the accompanying changes in respiratory function, and the presence of a cardiovascular reaction suggested that subcortical brain structures (especially the reticular formation of the medulla oblongata) are primarily responsible for the genesis and development of these changes. This hypothesis was confirmed by electrophysiological studies with potentials taken directly from subcortical structures. In addition, histological analysis showed pronounced changes in medullary nerve cells.

The effect of noise on the CNS was determined by the dynamics of evoked responses in the cerebral cortex and subcortex in intense noise conditions. It was observed that potentials evoked under these conditions in response to rhythmical light stimulation decrease in amplitude and then completely disappear after several dozen minutes. Changes in evoked responses were of a generalized nature and were observed in different parts of the cerebral cortex and also in subcortical formations. In cats with many electrodes implanted in cortex and subcortex, changes were observed first in medullary structures. Evoked responses were retained longest in the visual area of the cortex.

activation of medullary reticular mechanisms and subsequent blocking of afferent impulses in them, an attempt was made to decrease the effect of reticular formations (blocking them to some extent). Scopolamine preparations, including "aeron," were used for blocking purposes. It was found that preliminary introduction of scopolamine prevents the development of depression in evoked responses to a stimulus in the presence of noise. Evoked potentials continued to be recorded in cortical and subcortical formations in spite of the continuing effect of intense noise. Thus it was demonstrated that experimental blocking of the medullary reticular formation inhibited the development of depression of evoked responses to a rhythmical light stimulus. This served as further confirmation of the participation of reticular structures in the development of noise-induced changes. [W.A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Card 3/3



STRAKHOV, A. P. 19072

USSR/River Boats 4604.0207 Jan/Feb 1948

"New Soviet Standard Tugboat, the BR-400," A. P. Strakhov, Engr, 3 pp

"Rech Trans" Vol VIII, No 1

Official test of new 400-hp paddle-wheel river tugboat "Academician Krylov" with valve engine and 160-sq m water-tube boiler took place in Kievskiy Rayon in May 1947. Describes vessel's basic characteristics, body, internal arrangement and its maneuverability, traction, speed and power, with appropriate tables.

[redacted] 19072

SHAKOV, A. .

Tank Vessels

New high capacity fuel oil pumping station.
Mech. Transp. 12, No. 1, 1952.

9. Monthly List of Russian Accessions, Library of Congress, June 1952. UNCLASSIFIED.

[redacted]

Shipbuilding - Standards

Standardization in shipbuilding, West. pash., 52, No. 2, 1952.

Monthly List of Russian Accessions, Library of Congress, October 1952. Unclassified.

STRAKHOV, A.P.; YEFREMOV, G.V., inzhener, redaktor; AMININ, V.G., inzhener, retsenzent.

[New ship models for the Greater Volga] Suda novykh tipov dlia Bol'shoi Volgi. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-ry, 1954. 89 p. (MLRA 7:7)
(Volga river--Navigation) (Ships)

STRAKHOV, A.P.

USSR/ Engineering - Barges

Card 1/1 Pub. 128 - 7/34

Authors : Strakhov, A. P., and Kokhtev, A. A.

Title : Cargo barges made of unified interchangeable sections

Periodical : Vest. mash. 12, 21-31, Dec 1954

Abstract : The editorial gives some information concerning the construction of river cargo-barges with load capacity of from 100 to 5,000 tons, and from 100 to 12,000 tons. Illustrations; diagrams; tables.

Institution : .....

Submitted : .....

Osnovy Teorii i Ustroystva Sudov Vnutrennego Plavaniya, Rechnoy Transport Izdatelstvo, Moscow, 1955, pp 12-16, 28-30, 34-36, 204-208, 278-282.

"SOVIET INLAND SHIPBUILDING AND VESSEL CLASSIFICATION"

Translation M-31959, 31 Oct 56.

STRAKHOV, Aleksey Petrovich; GURTSOVSKIY, B.A., redaktor; DOLGIY, A.G., retsenzent; TURKOV, N.M., retsenzent; SHLENNIKOVA, Z.V., redaktor; BEGICHEVA, M.N., tekhnicheskiy redaktor.

[Principles of theory and structure of inland navigation vessels] Osnovy teorii i ustroistva sudov vnutrennego plavaniia. Moskva, Izd-vo "Rechnoi transport," 1955. 334 p. (MIRA 8:4)

(Naval architecture)

STRAKHOV, A.P., inzhener.

Establish standards for inland navigation vessels. Mekh. transp. 16 no.4:24-25 Ap '57. (MLRA 10:5)
(Inland navigation) (Merchant ships)

STRAKHOV, A.P., inzh.

New standard specifications for inland navigation vessels. Sudostroenie 22 [i.e.23] no.10:4-6 O '57. (MIRA 11:2)
(Shipbuilding--Contracts and specifications)
(Inland navigation)

STRAKHOV, A.P., inzh.

New three-deck diesel-electric passenger motorship "Lenin" with a capacity of 2250/2700 e.h.p. Rech.transp. 17 no.11:26-30 N '58. (MIRA 11:12)

(Motorships)

STRAKHOV, A., inzh.

Auxiliary steering gears of new vessels. Mech. transp. 19 no. 2:26-29 F '60. (MIRA 14:5)
(Steering gear)

STELKHOV, A.

Use of light alloys in the building of river ships. Mech. transp. 20 no.11:17-19 N '61. (MIRA 15:1)

1. Glavnyy insh. Rechnogo registra RSFSR.
(Light metals)
(Shipbuilding)

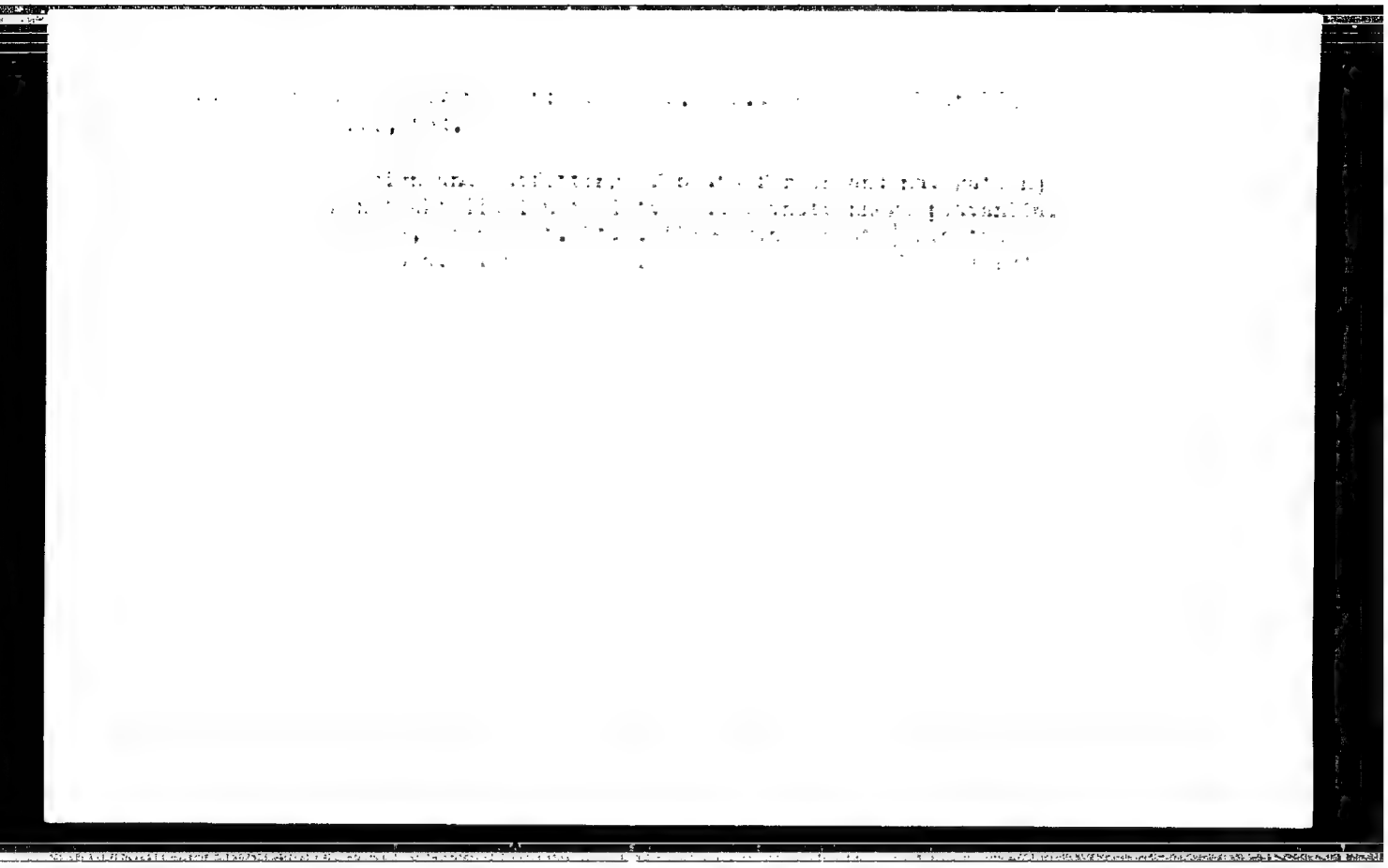
STRAKHOV, Aleksey Petrovich; TIKHOMIROV, N.A., retsenzent; YEFREMOV, G.V., retsenzent; SHLEMNIKOVA, Z.V., red. izd-va; RIMMAYA, I.V., tekhn. red.

[Principles of theoretical shipbuilding and the structural arrangement of ships for inland navigation]Osnovy teorii i ustroistva sudov vnutrennego plavaniia. Izd.2., ispr. i dop. Moskva, Izd-vo "Rechnoi transport," 1962. 224 p. (MIRA 15:10)
(Hulls (Naval architecture)) (Inland navigation)

STRAKHOV, A.P.

Research by the R.S.F.S.R. River Rigister on problems of strength and stability of inland navigation ships. Sudostroenie 28 no.9:78-79 S '62. (MIRA 15:10)

1. Glavnyy inzh. Rechnogo Registra RSFSR.
(Ship registers) (Inland navigation)



STRAKHOV, A.V.; PUSHKAREVA, Z.V.

Investigation of heterocyclic N-oxides. Report No. 9: Preparation and properties of n-oxides from heterocycles with condensed rings. Trudy Ural. politekh. inst. no.94:34-44 '60. (MIRA 15:6)

(Heterocyclic compounds)

5

AUTHORS: Kobozev, N.I., Lebedev, V.P., Strakhov, B.V., Zykova, G.I. 76-11-25/35

TITLE: The Physical Chemistry of Concentrated Ozone (Fiziko-khimiya kontsentrirovannogo ozona) III. The Explosive Oxidation of Nitrogen in Mixtures Containing Concentrated Ozone (III. Vzryvnoye okisleniye azota v smesyakh s kontsentrirovannym ozonom)

PERIODICAL: Zhurnal Fizicheskoy Khimii, 1957, Vol. 31, Nr 11, pp. 2547-2550 (USSR)

ABSTRACT: An oxidation of nitrogen under explosion in mixtures with concentrated ozone within the pressure range of from 25 to 100 mm torr was carried out. It is shown that within this range a linear increase of the nitrogen oxide leakage was observed in the case of increased pressure. The nitrogen oxide leakage curves in dependence on the composition of the initial mixture pass through a maximum at about 7% O_3. In the case of the here employed composition and the highest experimental pressure exercise (150 mm) the nitrogen oxide leakage amounted to about 2%. Comparatively small additions of oxygen considerably reduce this leakage. There are 4 figures and 3 Slavic references.

Card 1/2

76-11-25/35

The Physical Chemistry of Concentrated Ozone. III. The Explosive Oxidation of Nitrogen in Mixtures Containing Concentrated Ozone

ASSOCIATION: Moscow State University imeni M.V.Lomonosov (Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova)

SUBMITTED: September 18, 1956

AVAILABLE: Library of Congress

Card 2/2

S/189/60/000/004/001/006
B002/B060

11.1120

AUTHORS: Yemel'yanova, G. I., Strakhov, B. V., Lebedev, V. P.

TITLE: Density of Liquid Ozone

PERIODICAL: Vestnik Moskovskogo universiteta. Seriya 2, khimiya, 1960, No. 4, p. 11

TEXT: Values for liquid ozone density in available literature differ as much as 8% (Refs. 1-3). A new determination was, therefore, made at -195.6°C. A certain volume was filled with 100% gaseous ozone, and the pressure was measured; ozone was then condensed, and the volume of liquid ozone was measured with a measuring tube. The average value from four measurements was 1.619 ± 0.004 g/cm³, which is in good agreement with the most current data available. The method was checked by determining the density of liquid oxygen; the value found was 1.204 g/cm³, as against 1.2037 g/cm³ in Ref. 4. The errors in measurement did not exceed ±0.002%. There are 4 references: 1 Soviet, 1 German, and 2 US.

Card 1/2

54306

Density of Liquid Ozone

S/189/60/000/004/001/006
B002/B060

ASSOCIATION: Kafedra fizicheskoy khimii (Chair of Physical Chemistry)

SUBMITTED: March 15, 1960

Card 2/2

84307
S/189/60/000/004/003/006
B002/B060

11.1125

AUTHORS: Strakhov, B. V., Lebedev, V. P

TITLE: Explosiveness of Gaseous Ozone - Oxygen Mixtures in Metallic Containers

PERIODICAL: Vestnik Moskovskogo universiteta. Seriya 2, khimiya, 1960, No. 4, pp. 19 - 20

TEXT: As shown in Ref. 1, the explosiveness of ozone-oxygen mixtures in glass containers on spark-ignition is directly dependent on the ozone content. Here, in a similar way as in Ref. 1, the authors studied the explosiveness in a phosphorus-bronze metallic container (diameter 90 mm, height 180 mm) A 4 μF condenser was used for ignition; experiments made with the much stronger Tesla transformer yielded practically the same results. The pressure ranges investigated were up to 700 torr for O_2, and up to 100 torr for O_3. As may be seen from the diagram, mixtures rich in ozone that would explode in glass containers are still stable in metallic ones. The stability of the mixtures is approximately 25% greater in the

Card 1/3

Pl4307

Explosiveness of Gaseous Ozone - Oxygen Mixtures in Metallic Containers

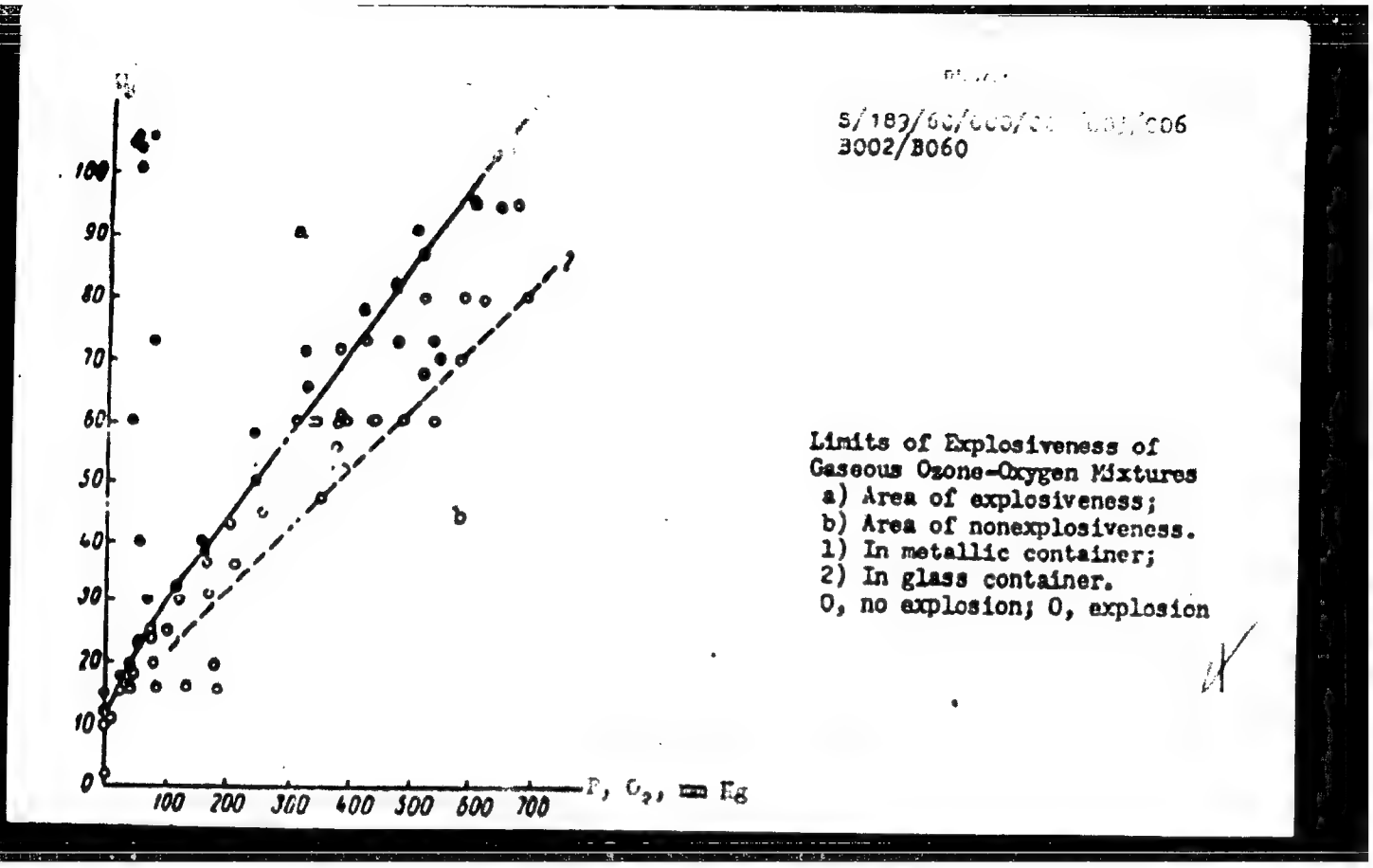
S/189/60/000/004/003/006
B002/B060

metal containers; with rising pressure this effect grows further. For pure ozone boundary of the region of explosiveness lies at a pressure of between 10 to 12 torr. There are 1 figure and 1 Soviet reference.

ASSOCIATION: Kafedra fizicheskoy khimii (Chair of Physical Chemistry)

SUBMITTED: March 15, 1960

Card 2/3



Limits of Explosiveness of Gaseous Ozone-Oxygen Mixtures
a) Area of explosiveness;
b) Area of nonexplosiveness.
1) In metallic container;
2) In glass container.
0, no explosion; 0, explosion

11.5000

81172
S/076/60/034/07/06/033
B015/B070

AUTHORS: Strakhov, B. V., Yegorov, V. I., Lebedev, V. P., Kobozev, N. I.

TITLE: The Physical Chemistry of Concentrated Ozone. IX. The Dependence of the Yield of Nitric Oxide on the Explosion Temperature of Ozone - Nitrogen Mixtures

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 7, pp. 1524-1527

TEXT: Investigations were made on the dependence of NO yield on the composition of ozone - nitrogen mixture for constant temperature of explosion and an initial pressure of 100 torr, as well as for constant compositions of the initial gaseous mixture. The experiments were performed in an apparatus already described (Ref. 1). The temperature of the explosion was controlled by introducing stoichiometric mixtures of methane and ozone in the explosion pipette. The isotherms of NO yield (Fig. 4) obtained for the constant temperatures of 3000° and 3500°K of explosion show a maximum for a 40% ozone content in the mixture. If the composition of

Card 1/2

The Physical Chemistry of Concentrated Ozone. IX. The Dependence of the Yield of Nitric Oxide on the Explosion Temperature of Ozone - Nitrogen Mixtures

S/076/60/034/07/06/003
B015/B070
B197

the mixture is kept constant (65% O_3 + 35% N_2), NO yield varies with explosion temperatures from 0.6% at 2500°K to 3% at 4250°K, viz., a five-fold increase in the yield for a 1.7-fold increase in temperature. The results obtained are explained on the assumption that the yield varies according to the change in the thermodynamic equilibrium of the reaction $N_2 + O_2 \rightleftarrows 2\ NO$ at the temperature of explosion. Ye. N. Yeremin, A. N. Mal'tsev, Ya. B. Zel'dovich, P. Ya. Saiovnikov, D. A. Frank-Kamenetskiy are mentioned in the text. There are 5 figures and 4 references: 3 Soviet and 1 German.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: October 5, 1958

Card 2/2

83692

Physical Chemistry of Concentrated Ozone. X. Influence of the Vessel Diameter on the Nitrogen Oxide Yield in the Explosion Oxidation of Nitrogen in Mixtures With Ozone

S/076/60/034/008/004/011
B015/B054

experiments. A. G. El'kenbard, R. I. Genkina, and M. V. Polyakov are mentioned in the paper. There are 2 figures and 5 Soviet references.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: October 8, 1958

Card 2/2

23009

11.8300
11.1125

S/189/61/000/004/002/002
D051/D112

AUTHORS: Strakhov, B.V., Lebedev, V.P., Kobozev, N.I.

TITLE: Transition of the detonation of a gaseous ozone-oxygen mixture into a liquid ozone-oxygen solution

PERIODICAL: Moskva, Universitet. Vestnik. Seriya II Khimiya, no. 4, 1961, 31-32

TEXT: The present study is concerned with the explosive properties of the system liquid ozone-oxygen solution - gaseous ozone-oxygen mixture. It continues investigations of N.I. Kobozev, V.V. Yastrebov, and Ye.N. Pitskhelauri (Ref. 1: Zhurn. fiz. khimii, 33, 649, 1959; Ref. 2: Zhurn. fiz. khimii, 33, 1209, 1959), which showed that the explosive sensitivity of ozone-oxygen solutions abruptly diminishes with increasing oxygen concentration. In a special cylinder, which permitted separate preparation of liquid and gas of various concentrations, the authors studied the explosiveness of the liquid ozone-oxygen solutions depending on composition and pressure, from 150 to 500 mm mercury column, of the gaseous ozone-oxygen mixtures, which were in contact with the liquid. The experimental results are given in the figure.

Card 1/3

The curves represent the boundaries of explosiveness for the indicated pressures of the gas phase. It can be seen that growing pressure shifts the boundary of transition of the detonation from gas to liquid towards lower ozone concentrations in the gas, whereas lower ozone concentrations in the liquid shift this boundary towards higher ozone concentrations in the gas. The shaded section of the figure represents the zone of safety, whose points correspond to concentrations of ozone in the gas and liquid phase below 50 and 25%, respectively, where detonations of the gas are not transmitted to the liquid. This zone holds for pressures of the gas phase not above 500 mm mercury column. There are 1 figure and 2 Soviet references.

X

ASSOCIATION: Kafedra fizicheskoy khimii (Department of Physical Chemistry)

SUBMITTED: July 9, 1960

S/190/61/003/004/002/002
B051/B112

Transition of the detonation ...

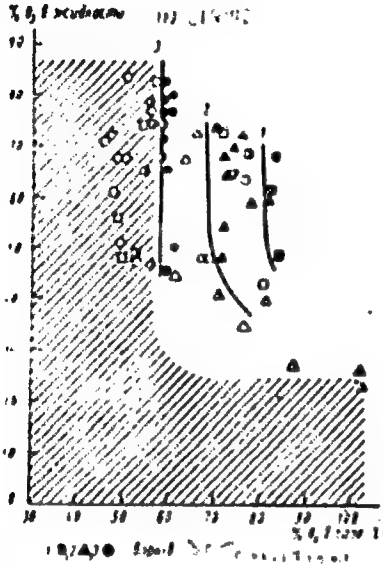


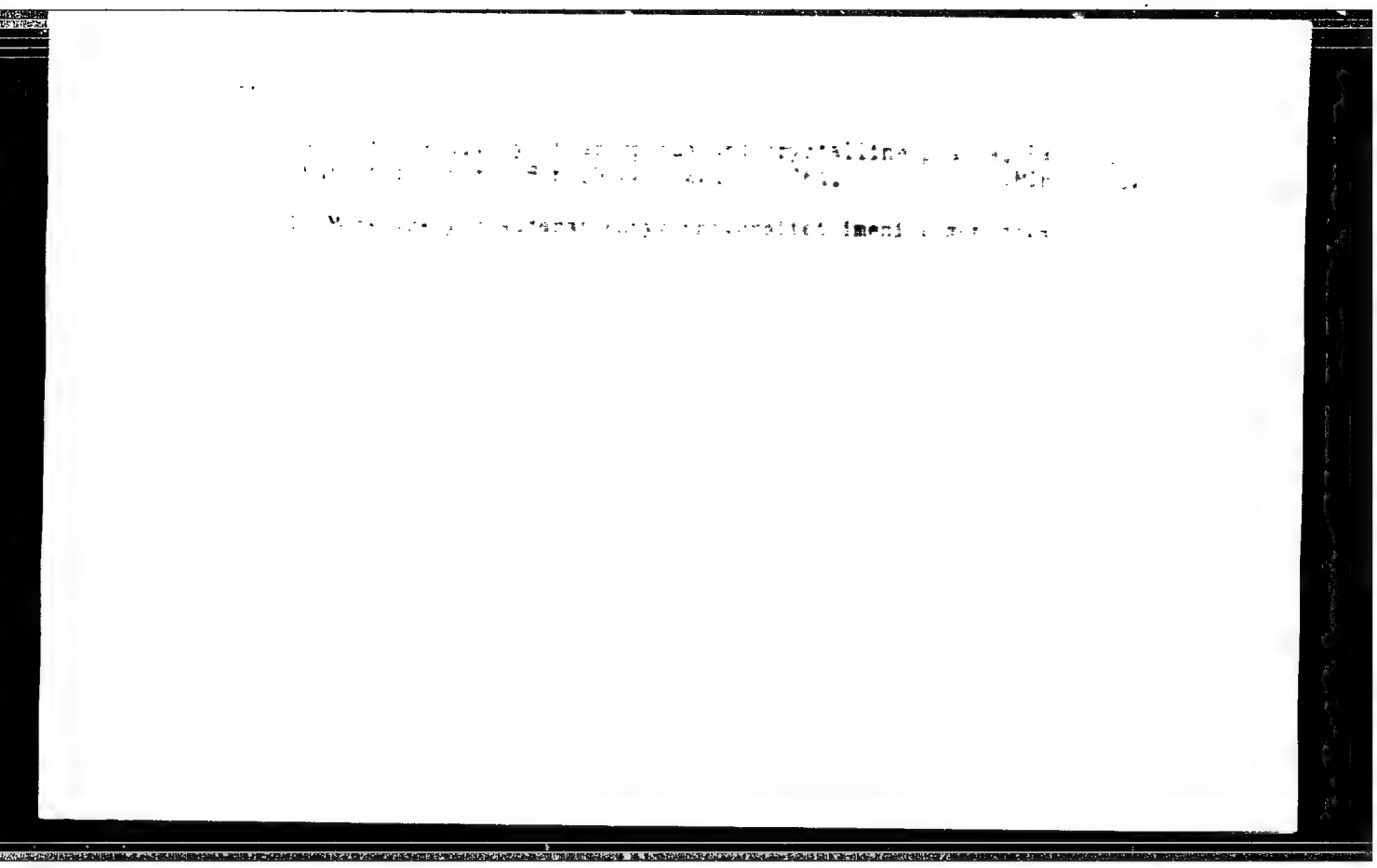
Fig. Boundaries of explosiveness of liquid ozone-oxygen mixtures:
1 - at a pressure of 150 mm mercury column;
2 - at 300 mm mercury column;
3 - at 500 mm mercury column

Card 2/3

[illegible], [illegible].V., [illegible], [illegible], [illegible], [illegible]

Physical chemistry of concentrated ozone. Part 9. Zhur. fiz. khim. 36 no.11:2388-2392 N'62. (MIRA 17:5)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.



L 36187-66 EWT(m)/EWP(j)/EWP(t)/ETI IJP(c) RM/JD/WB/JW
ACC NR: AP6010749 SOURCE CODE: UR/0075/66/000/003/0306/0309

AUTHOR: Strakhov, B. V.; Kobozev, N. I.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet)

TITLE: Decomposition and oxidation of nitrous oxide in an electric discharge

SOURCE: Zhurnal fizicheskoy khimii, v. 40, no. 3, 1966, 706-709

TOPIC TAGS: nitrogen oxide, electric discharge, oxygen

ABSTRACT: Nitrous oxide N_2O was decomposed and oxidized in an electric discharge for the first time. Decomposition of pure N_2O at 100 mm Hg produced a maximum yield of 23.2 vol. % at a specific energy U/v = 18.0 W hr/liter. For the oxidation, the highest yield in the case of N_2O - O_2 mixtures at 240 mm Hg was 12 vol. % and also corresponded to U/v = 18. It is postulated that in the decomposition of N_2O, the formation of NO is due to the oxidation of N_2O molecules by atomic oxygen formed by the partial decomposition of N_2O. Authors are deeply grateful to Ye. N. Yeremin and A. N. Val'tsev, who supplied the discharge apparatus, and to V. L. Ivanter, who took a direct part in the experiments. Orig. art. has: 1 figure and 2 tables.

SUB CODE: 07/ SUBM DATE: 15Apr65/ ORIG REF: 007/ OTH REF: 001

Card 1/1 UDC: 541.13

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653420011-8

[illegible], I. I.

[illegible] Izvestiya [illegible], No. [illegible] -- Rezyume na [illegible] yaz.

[illegible] - Vol. 22, Moskva, [illegible]

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653420011-8"

AUTHOR: STRACHOW,G.I. PA - 2784

TITLE: The Dynamic Resistance of a Rod in the Case of a Polarized Load. (Dinamitschiskaja ustojtschiwost' sterzhnja pri dejstwii pojarno-orientirowannoj nagruski. Russian)

PERIODICAL: Latvijas PSR Zinatnu Akad.Vestis. 1957, Vol 1, Nr 3 (116), pp 153-166 (U.S.S.R.)

Received: 3 / 1957 Reviewed: 7 / 1957

ABSTRACT: The position of the pole exercises an essential influence on the nature and width of the oscillation domain. According to the position of the pole the rod may be in a stable equilibrium or in a parametric resonance. The oscillation amplitude is limited in dependence on the load and the pole angle if the dependence is due to a spatial function.

ASSOCIATION: Laboratory for Machine Engineering of the Academy of Science of the Latvian S.S.R.

PRESENTED BY:

SUBMITTED:

AVAILABLE: Library of Congress

Card 1/1

25(0) PHASE I BOOK EXPLOITATION SOV/1209

Akademiya nauk Latviyskoy SSR. Institut mashinovedeniya

Voprosy dinamiki i prochnosti (Problems of Dynamics and Strength) Riga, Izd-vo AN Latviyskoy SSR, 1958. 178 p. (Series: Its: Sbornik statey, vyp. 5) 1,500 copies printed.

Ed.: Vengranovich, A.; Tech. Ed.: Inkis, R.; Editorial Board of Series: Panovko, Ya.G., Doctor of Technical Sciences, Professor (Resp. Ed.); Aynbinder, S.B., Candidate of Technical Sciences, Docent; Kalinin, N.G., Candidate of Technical Sciences, Docent.

PURPOSE: This book is intended for research engineers and scientists concerned with problems of dynamics and strength of structures.

COVERAGE: The book is a collection of ten research papers, prepared by members of the Akademiya nauk Latviyskoy SSR (Academy of Sciences of the Latvian SSR), the Latviyskiy gosudarstvenniy universitet (Latvian State University) and the Rizhskoye Krasnoznamennoye vysshaye inzhenerno-aviatsionnoye voennoye uchilishche (Riga Red-Banner Higher Military School for Aeronautical Engineering imeni

Card 1/3

AVAILABLE: Library of Congress

MS/lsb
3-9-59

Card 3/3

STRAKHOV, G.

GENERAL

PERIODICALS: VESTIS, NO. 5, 1958

STRAKHOV, G. Constructional hysteresis in pressure binding during stretching and compression. In Russian. p. 129.

Monthly list of East Eurupean Accessions (EEAI) LC, VOL. 8, No. 2, February 1959, Unclass.

PHASE I BOOK EXPLOITATION SOV/3927

Akademiya nauk Latviyskoy SSR. Institut mashinovedeniya

Voprosy dinamiki i prochnosti; sbornik statey; vyp. VI (Problems of Dynamics and Strength; Collection of Articles, No. 6) Riga, Izd-vo AN Latviyskoy SSR, 1959. 159 p. Errata slip inserted. 1,500 copies printed.

Ed.: A. Vengranovich; Tech. Ed.: A. Klyavinya; Editorial Board: Ya.G. Panovko, Corresponding Member, Academy of Sciences Latviyskaya SSR, Professor, Doctor of Technical Sciences (Resp. Ed.); S.B. Aynbinder, Docent, Candidate of Technical Sciences; and N.G. Kalinin, Docent, Candidate of Technical Sciences.

PURPOSE: This book is intended for mechanical engineers and technical workers.

COVERAGE: The book presents 10 articles on problems related to shock absorbers, railroad cars, thin shelled bars, crane structures, automatic balancing, oscillations, and the performance of mechanical presses. The authors are technical or scientific workers at

Card 1/3

the Institut mashinovedeniya Akademii nauk Latviyskoy SSR (Institute of Science of Machines of the Academy of Sciences Latviyskaya SSR), at the Rizhskiy politekhnicheskiy institut (Riga Polytechnic Institute), and at the Rizhskoye Krasnoznamennoye vysshaye aviatsionnoye voyennoye uchilishche imeni Leninskogo komsomola (Riga Red Banner Higher Military Aviation School imeni Leninskiy Komsomol). No personalities are mentioned. References are given following each article except one.

TABLE OF CONTENTS:

PANOVKO, Ya. (Riga); STRAKHOV, G. (Riga)

1. Structural damping in threaded joints. Vestis Latv ak no.12: 15-26 '59. (EEAI 9:11)

1. Akademiya nauk Latviyskoy SSR, Institut mashinovedeniya.
(Damping (Mechanics))

PHASE I BOOK EXPLOITATION SOV/5501

Kalinin, Nikolay Georgiyevich, Yuriy Alekseyevich Lebedev, Volga Ivanovna Lebedeva, Yakov Gilelevich Panovko, and German Ivanovich Strakhov

Konstruktsionnoye dempfirovaniye v nepodvizhnykh soyedineniyakh (Structural Damping in Stationary Joints) Riga, Izd-vo AN Latviyskoy SSR, 1960. 169 p. Errata slip inserted. 2,000 copies printed

Sponsoring Agency: Akademiya nauk Latviyskoy SSR. Institut avtomatiki i Mekhaniki

Ed. (Title page): Ya. G. Panovko, Corresponding Member, Academy of Sciences Latvian SSR, Professor, Doctor of Technical Sciences; Ed.: A. Vengranovich; Tech. Ed.: Ye. Piladze.

PURPOSE: This book is intended for research scientists and engineers concerned with structural mechanics.

Card 1/5

PANOVKO, Ya.(Riga); STRAKHOV, G.(Riga)

Constructive damping in grooved joints. Vestis Latv ak no.8:39-46 '60. (EEAI 10:9)

1. Akademiya nauk Latviyskoy SSR, Institut mashinovedeniya.

(Machinery)

S/681/62/000/008/001/004
E081/E141

AUTHORS: Penovko, Ya.G., and Strakhov, G.I.

TITLE: The approximate investigation of forced vibrations in elastic systems with constructional damping

SOURCE: Akademiya nauk Latviyskoy SSR. Institut avtomatiki i mekhaniki. Voprosy dinamiki i prochnosti. no.8, 1962. 3-12

TEXT: In many constructional schemes, the force-displacement loops are either of polygonal form, or are formed by two curved arcs. Loops of the first kind occur in constructions with "concentrated" friction, or in constructions in which slip under load occurs instantaneously in all regions of contact. Loops of the second kind occur in joints for which the slip region changes with changing load. The amplitude A of forced vibrations in a linear system with viscous friction is given by:

$$A = \frac{P_0}{\sqrt{\left[c(A) - m\omega^2\right]^2 + \frac{\Psi^2(A)}{\pi^2 A^2}}} \qquad (1)$$

Card 1/2

The approximate investigation of ... S/681/62/000/008/001/004
E081/E141

where: c is the stiffness of the system; ω the frequency of forced vibration; Ψ the area of the hysteresis loop; m the mass; and A the amplitude of the disturbing force. This formula is modified to allow for variation of c and Ψ with A, and applied to calculating frequency-response curves appropriate to a system of the first kind with a hysteresis loop in the shape of a parallelogram, and to a system of the second kind typified by the torsional vibrations of a rod clamped at one end carrying at the other a disc with its plane perpendicular to the axis of the rod. It is concluded that the modified Eq.(1) gives a satisfactory first approximation to the behaviour of the system. There are 6 figures.

Card 2/2

L 14270-63 EWP(r)/FCS(f)/EWP(q)/EWT(m)/BDS JD
ACCESSION NR: AP3001681 S/0197/63/000/003/0102/0106

AUTHOR: Strakhov, O.

65
56

TITLE: The fiftieth anniversary of a savant

SOURCE: AN LatSSR. Izv., no.3, 1963, 102-106

TOPIC TAGS: Panovko, Ya. G.

ABSTRACT: This presents a short biography of Yakov Gilelevich Panovko, who since 1950 has been professor of theoretical mechanics and resistance of materials at the Latvian State University in Riga and since 1958 has also held the same position with the Polytechnic Institute in Riga. Panovko was born in 1913. He graduated in 1935 from the Moscow Institute of Civil Engineering, received his Master's Degree in 1939, and his Doctor's Degree in 1940. From 1940 to 1943 he served with the Soviet army, then from 1943 to 1950 held the position of professor at the Leningrad Red Banner Military-Aviation Engineering Academy. He has been a member of the Soviet communist party since 1940. During the years of his scientific and educational occupation Panovko published over 60 scientific papers, among them eight books, two of which were translated into Chinese and German. Panovko is the initiator of the serial symposia publication entitled "Problems of Dynamics and

Card 1/2

L 14270-63

ACCESSION NR: AP3001681

9

Strength." He organized in Riga seminars dealing with mechanical and engineering problems. A list of Panovko's books is as follows:

1947: Resilient vibrations of the parts of the aircraft (with Ye. P. Grossman)
The dynamics of a variable mass body (with N. V. Butenin)
1948: Peculiarities in the construction of reactive aircraft (with A. G. Bedunkovich, V. Ya. Kry*lov, and others)
Statics of resilient thin-walled rods (with G. Yu. Dzhanelidze). In Chinese, 1955, Peking
1949: Elements of construction mechanics of thin-walled structures (with C. H. Kahm). 2nd edition 1952. In Chinese, 1955, Peking. In German, 1956, Berlin
1950: Construction mechanics of aircraft (with G. G. Rostovtsev)
1955: Textbook on resistance of materials (in Latvian)
1957: Principles of applied theory of resilient vibrations

Orig. art. has: 1 photograph.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 03Jun63 ENCL: 00

SUB CODE: MM NO REF SOV: 000 OTHER: 000

Card 2/2

[redacted], N.[redacted]; [redacted], G.N.; KUZNETSOV, V.A.

Studying variations in pipe wall thickness in the extrusion of heavy nonferrous metal alloys on horizontal 1500 T. presses. Trudy IFI no.243:141-145 '65. (MIRA 18:6)

136-8-3/21

AUTHORS: Strakhov, G.N., Engineer, Koshurin, A.V., Engineer

TITLE: Extrusion of Bars with a Movable Container Bush (Pressovaniye prutkov s podvizhnoy vtulkoy konteynera)

PERIODICAL: Tsvetnye Metally, 1957, Nr 8, pp.16-20 (USSR)

ABSTRACT: The authors (photographs given) consider two schemes of metal flow during extrusion (Fig.1), possible causes of lamination and ways of avoiding them. They comment favourably on reverse flow extrusion and suggest that unsatisfactory surface qualities obtained in previous investigations were due to unavailability of suitable equipment. To overcome this shortage the authors proposed the use of a movable container bush to enable forward action presses to be used for reverse-flow extrusion. Here the ingot is placed in the movable bush whose length is half that of the container (Fig.2). Details of this method are given and its application to different alloys on a 1500 ton horizontal hydraulic press is described, a metal balance for 20-35 mm diameter bars of one alloy extruded from ingots 350 mm long and 175 mm in diameter. Various modifications of equipment and procedure have been tried and its use extended to a wider range of alloys. This work and the latest form of the

Card 1/2

ACC NR: AP6030608 (A, N) SOURCE CODE: UR/0413/66/000/016/0095/0095

INVENTOR: Bobylev, A. V.; Mironov, S. S.; Nikolayev, A. K.; Strakhov, G. N.; Shabashov, Ya. F.; Sergeyev, L. N.; Goryunov, I. I.

ORG: none

TITLE: Copper-base alloy. Class 40, No. 185068 [announced by the State Scientific-Research and Design Institute for Alloys and Processing of Nonferrous Metals (Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut splavov i obrabotki tsvetnykh metallov)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 16, 1966, 95

TOPIC TAGS: copper chromium alloy, zirconium containing alloy, vanadium containing alloy, CHROMIUM CONTAINING ALLOY, COPPER BASE ALLOY, ALLOY COMPOSITION

ABSTRACT: This Author Certificate introduces a copper-base alloy containing chromium and zirconium. To improve the alloy physical and mechanical properties, its chemical composition is set as follows: 0.2—1% chromium, 0.1—0.8% zirconium, and 0.01—1.0% vanadium. [ND]

SUB CODE: 11/ SUBM DATE: 10Feb65/ ATD PRESS: 5076

Card 1/1 UDC: 669.35'26' '292'296